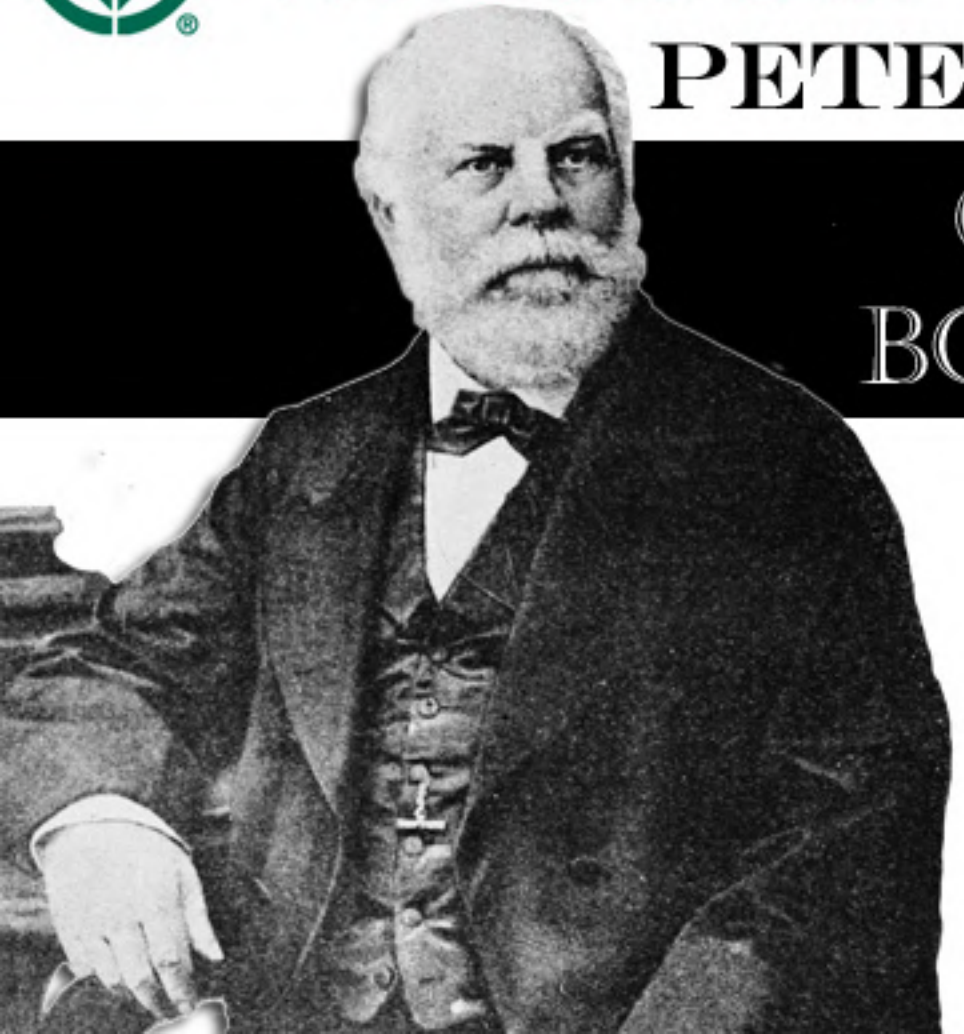
Missouri Botanical Garden

Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

June 21 77

	18 White Oaks grew	13 Black oaks grew
In the first 20 years	~~0.8~~	
~~approximately~~	0.8 lines	1.6 lines
20 – 30 years	0.8 "	1.7 "
30 – 40 "	0.7 "	1.2 "

Growth of Black oaks nearly twice as fast as of White oaks. and if Q. nigra and the California are deducted, the disproportion is still greater

Growth apparently nearly equal (in each) of the first 20 years – or in the Black Oaks a little slower than 30 and 40 years

Aug 8th 77

Sapwood ✻	19 White oaks	8 Black oaks
thickness	18 lines	21 lines
~~Time~~ of growth	22 years	17 years

0 1 2 3 4 5 6 7 8 9 10
cm
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5808

Mr Gray

you can not see my notes, stowed away where they can not be found — it would cause me a good deal of trouble to do all that I expect over again, and here is Mr Arthur of Iowa who wants to know all about it — I have off hand told him, he must consider it a new species

L. spiralis

Do you know a Magnolia which they send us bought here from NOrleans? It is intermed. between Magnolia and Michelia — two valved capsule? (Both?) an entire, closed (fully inbricate) silky third one, six ovoid petals long stiped torus

Adelphus fits, nor does Michelia seem to fit entirely. They call it Magnolia fosuta

What is the Laborandi leathery leaf leaflets note-

new drug a large pinnate — Sapindaceae? Correct answer glabrous

Revised in Liebmann's Chêne

Cambridge Oct 14 1883

Quercineae — Castaneineae

Styli dorsus superficiem internam stigmatosi — Styli apice stigmatosi

Amenta ♂ pendentia — Amenta ♂ erecta

(Folia rare integra) — (Folia saepissime integra)

Cupula echinata . demum patula 2–3 flora

Fagus — Castanea

Castanopsis

Cupula ignobiculato – squamosa, 1-flora

Quercus — Pasania

Cupula verticillato squamosa 1-flora

Cyclobalanopsis — Cyclobalanus

Subfamilia

Quercineae Amenta ♂ pedula, styli fistulas (vel supra) stigmatosi:

Genera

Subgen 1. Lepidobalanus, short styles, abortive ovules basal, pericarp thin, glabrous inside

Sect. a Eulepidobalanus × Cerris: Q. pedunculata, Cerris, undulata &c.

×× pinnatifidae: Q. alba, pubescens.

××× Lyratae: Q. stellata, macrocarpa, Lyrata

Sect b. Prinus Q. Prinus, bicolor, imbricaria, Castaneifolia, prinoides

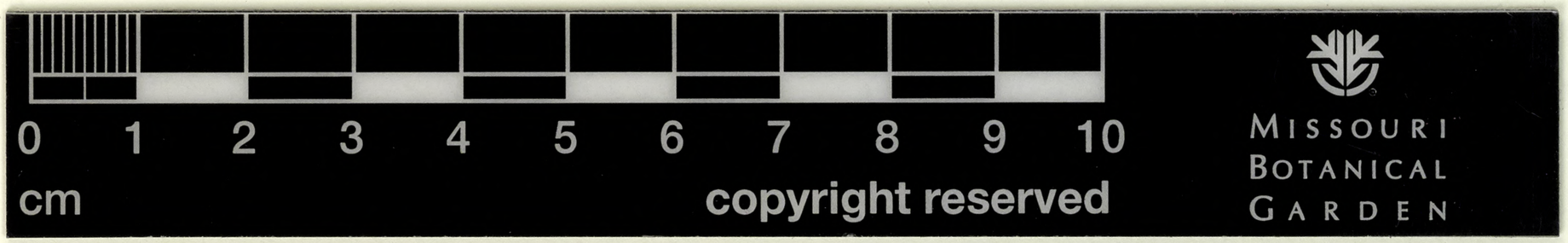
Sect c. Macrocarpaea pericarpio crassum, Cotyled. inaequales — e Mexico

Sect d Ilex Q. Ilex, virens, agrifolia, pungens, chrysolepis &c.

folia rigida semperdurantia integra vel spinosa &c

Subgen 2. Heterobalanus styli acuti, linearis, reflexi Q. semecarpifolia Sm. It. p. 15 Nepaul only specimen.

RBC



5809

Subgen 3 Erythrobalanus Styli linearis apice canaliculati etc. capitati American! The most natural of all the subgenera of Quercus. Probably many hybrids — mostly bicarpellate fruit

Sect a. Lucerythrobalanus Q. subg Erythrobalanus Torr. Gr. Q. obtusa etc Georgiana, Tinctoria. have the old discipulus in the large fruit distinctly preserved

Sect b. Microcarpaea the same but smaller acorns, discipulus indistinct — persistent thinner. Q. falcata ilicifolia, aquatica, nigra, virginiana Phellos etc

Sect c Heteroscarpaea Annual prolif., ovules at top of seed — Mexican species

Sect d Lepidobalanoides Annual prolif. ovules at base of seed; 6 tropical American species the most southern in Central America: Q. Humboldtii, Lindeni, tolimensis etc

Subgen 4 Cerris Styli linearis subulati etc Ovule abortive ad basin seminis

Sect a Eucerris squamae cupulae linearis reflexae Q. Cerris, Vallonea, Libani etc

Sect b. Erythrobalanopsis cupula glandis majorem partem tegens Q. Libani, Daphnoides etc

Sect c Suber cupulae squamae crassae breves, erectae Q. Suber, pseudosuber

Sect d. Ilicopsis cup. squamae rigidae, mediis reflexis Q. ilicifolia parva spinosa virgil occidentalis etc & Q. rotundifolia

Cyclobalanopsis Oerst. Quercus sect Cyclobalanus Endl. Gr. pro parte Amenta ♂ pendula [plerumque annua] Styli 3 breves, apice dilatati — glans perianthio tenui maturo cincta ovula abortiva supera. Cupulae squamae verticillatae; 21 species — North India, China & Japan

Subgen 1. Eucyclobalanopsis maturat. ann. etc.
Subgen 2 Pasanopsis maturatio biennis styli apice dilatati. Java
Subgen 3 Cyclobalanoides " " " " capitati.

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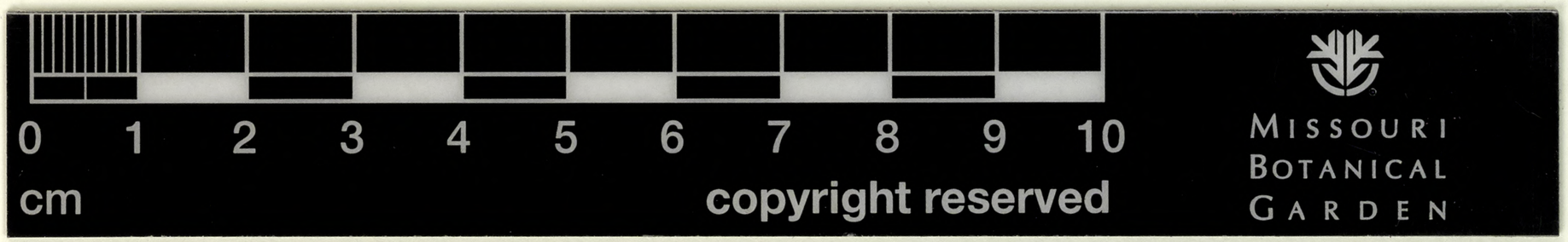
Subfamilia Castaneae Amenta ♂ erecta; styli apice poro stigmatoso

Cyclobalanus Oerst sect Cyclobalanus & Chlamydobalanus Endl. pro parte. Lithocarpus. Styli brevissimi vel nulli

Pasania Oerst sect Pasania & Chlamydobalanus in parte; Islands of the Indian Ocean glans erecta, connata imposita 6-cyclica, erecta, fructu

South eastern Asia & Islands
Q. densiflora in California



Cambridge Oct 1873

Fred. Michael Liebmann born 1813, died 1856. went to Mexico 1840 where he met Karwinski and Cater Ghiesbrecht, headquarters at Mirador, explored Orizava afterwards Oaxaca & Tehuantepec; returned early in 1843

Querery Michaux the elder on Oaks of America, the younger in Sylva.

Louis Née (Frenchman, in the Spanish Expedition under Malaspina) end of last century Humboldt & Bonpland.

Dr Schiede visited 1830
Henry Galeotti (Belge) 1835–40
Theod Hartweg 1836 –
Liebmann 1840 – 1842
Oerstedt (A.S.) 1846–48
Warszewicz (correctly spelled!) 1844 – made many excursions with Oerstedt

Blume, Java 1817–26 also Japan
Korthals Java & Sumatra 1832–33
Junghuhn, Java (published 1851)
Teysmann Sumatra 1855–58 —

Nathaniel Wallich India 1818–47
J. D. Hooker & Thomson 1848–50

Thunberg K. Japan 1784
Karl Koch 1836 Tschihatcheff 1846 Kotschy in Eastern Asia

Sumatra & Java have species of oaks quite different from one another

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cm
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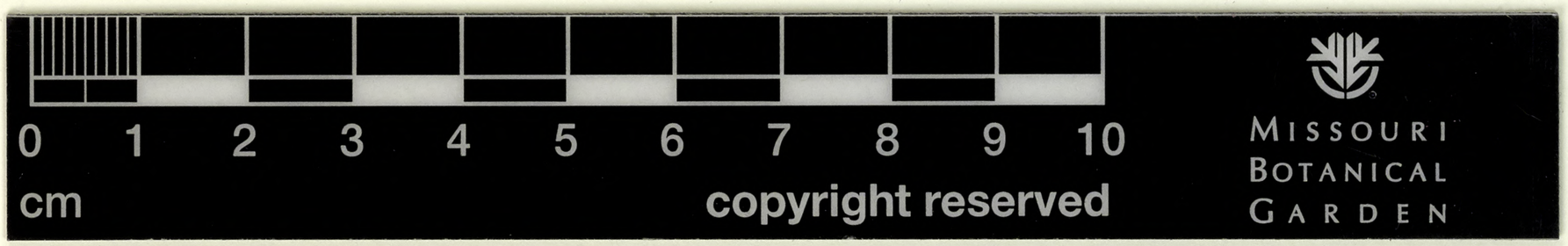
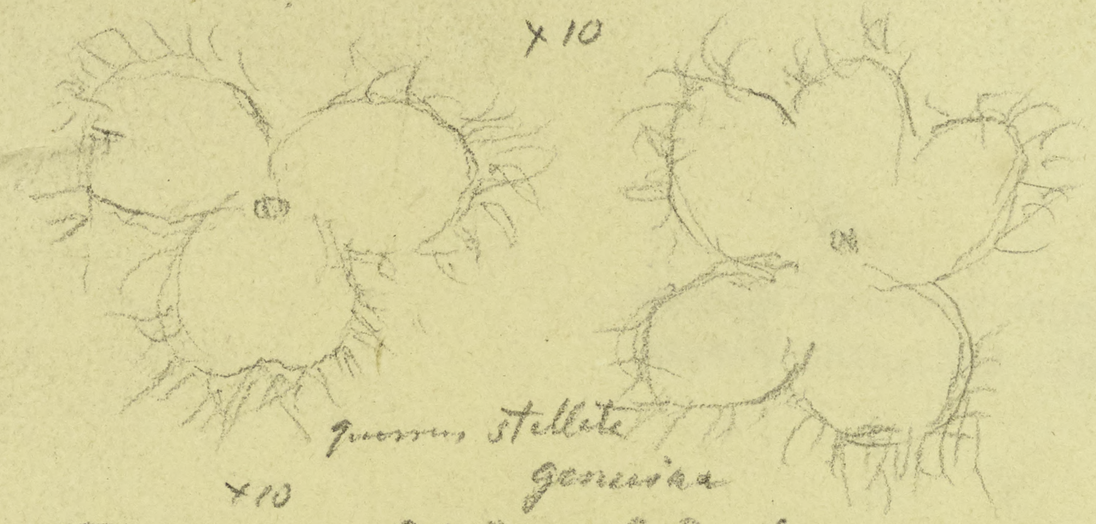


Nov 15 1823



×10

Gyrotheca stellata
Gerardia
Sillafton, S. Carolina

6-8 anthers

×10

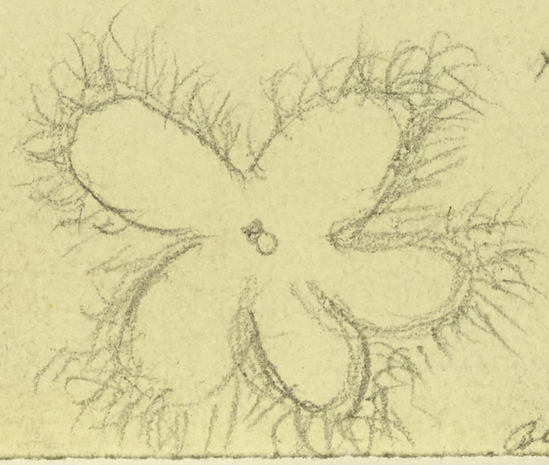
anthers before opening

×10

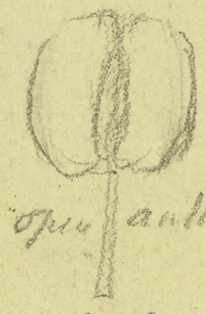
6 anthers
Smooth
glabrous

rhachis glabrous

G. stellata leucigata
Occoh Hill, on Savannah River
Mallichamp



×10



6 anthers

Open anthers

G. stellata
v. leianthera
Clafton S. Carol

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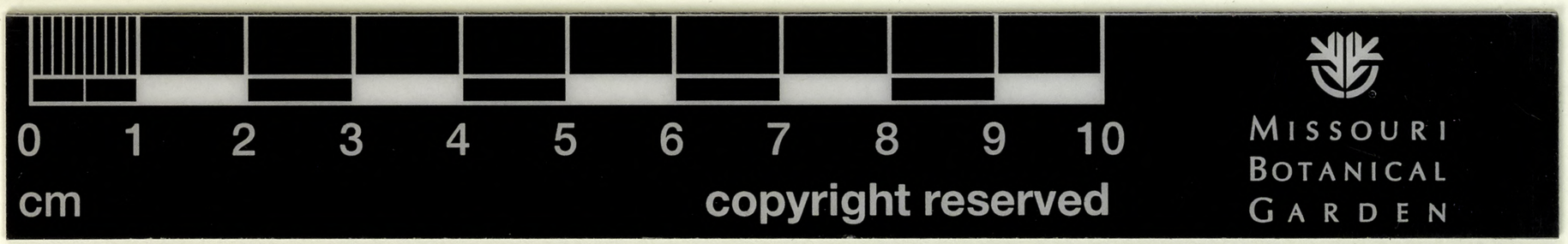

21 Q. macrocarpa Mx. Engl^m in Missouri!

β. abbreviata = nr St L Engl^m

γ. minor circa St L. Engl^m!

Q. breviloba in Mich. Engl^m!

Q. prinus (Coop. l. c.)

β acuminata. Mo Engl^m!

γ ~~Woodiana~~

Chinquapin Mx

Q. stellata Wangenh (Muhlenbergii) Mo Rhiz 305

Q alba L-γ microcarpa Nr St L. Engl^m!

Q. rubra = (Q. nigra Engl) Engl^m! Mo

β runcinata Nr St Louis Englm!

Q. palustris Du Roi Mo Engl^m!

Q. coccinea. α coccinea Mo Engl^m

β nigrescens = Q. tinctoria Mx Mo Engl^m

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0 1 2 3 4 5 6 7 8 9 10
cm
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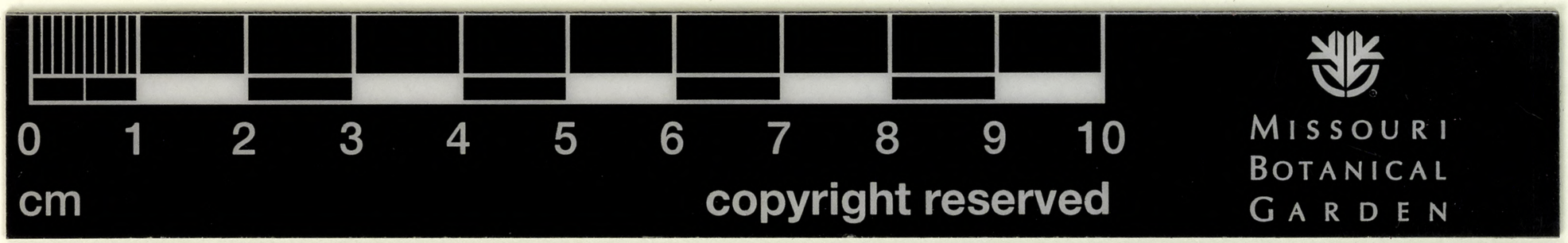
	1 mm	10 mm	20 mm	30 mm	40 mm	50 mm	60 mm	70	80	90
1. 0.0024096385	or 0.0024	0.0265	0.0506	0.0747	0.0988	0.1229	0.1470	0.1711	0.1952	0.2193
2. 0.0048192770	0.0048	0.0289	0.0530	771	0.1012	1235	1494	1735	1976	2217
3. 0.0072289155	0.0072	0.0313	0.0554	795	1036	1277	1518	1759	2000	2241
4. 0.0096385540	0.0096	0.0337	0.0578	819	1060	1301	1542	1783	2024	2265
5. 0.0120481925	0.0120	0.0361	0.0602	0.0843	0.1084	0.1325	0.1566	0.1807	0.2048	0.2289
6. 0.0144578310	0.0145	0.0386	0.0627	868	1109	1350	1591	1832	2073	2314
7. 0.0168674695	0.0169	0.0410	0.0651	892	1133	1374	1615	1856	2097	2338
8. 0.0192771080	0.0193	0.0434	0.0675	916	1157	1398	1639	1880	2121	2362
9. 0.0216867465	0.0217	0.0458	0.0699	940	1181	1422	1663	1904	2145	2386
10. 0.0240963850	0.0241	0.0482	0.0723	0.0964	0.1205	0.1446	0.1687	0.1928	0.2169	0.2410

1 — 100 millimeter, divided by 415

quotient 0.0024096385 give the above

B. PROCTOR NO.



JNO. S. HEALY,

DRUGGIST AND CHEMIST,

S. W. Cor 5th and Myrtle Sts.

Spuibbs' Preparations constantly on hand.

℞

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cm 0 1 2 3 4 5 6 7 8 9 10
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Quercus Durandii Cap Peachy

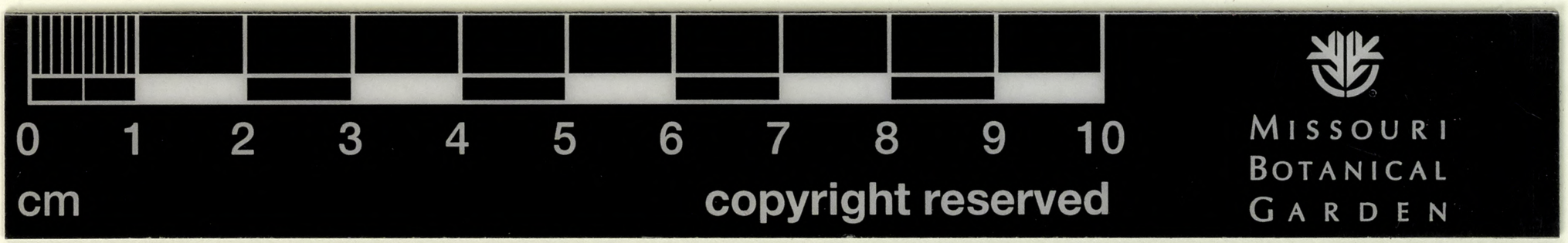
Quercus Durandii Buckl. from Carlton & Scott
Hook. Burrs of Arbret. Boreali-Amer. (Longwood)
Oak & Sons of Mexico
(Oak & Sons coll.
= Rex coll.

Q. Muhlenbergii (Boyle) 17" diam
bark 2" thick, deeply cracked
sap 2 3/4" 27 rings outer ones quite small
wood 4" rad 46 rings, very variable = thin lines

Sassafras (Lebanon) 23" diam
bark 1 1/2 - 1 3/4 "
sap 4 111 7 rings
wood 10" diam 106 rings

Douglas Menzies (Boyle) 35" diam
bark 3" mottled, full of woodpecker holes
sap 1 1/2 - 1 3/4" abt 60 rings
wood red. 13" abt 220 rings

Quercus Robin (Kittell's) shoot with good large leaves
Mexican Fraxon Leaves stipules!



rupestris
Vitis cordifolia
for Pakon

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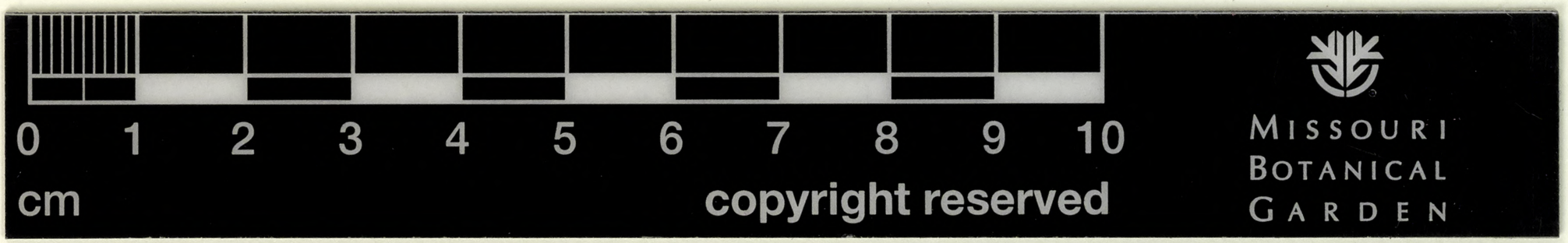

Californische Eichengallen

in Botan. Zeitung 7 May 1875

Dr Czech p. 322

Osten-Sacken Nordamerik.

Gallen in Stettiner

Entomol. Zeitung 1861

p. 405

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cm
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Quercus coccinea has down
on young leaves, which is like that
of rubra and soon disappears
and a glabrous or nearly glabrous
rhachis of 5 anents

Q. tinctoria holds the down of
leaves firmly and the 5 rhachis
is pubescent or tomentose

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Druckerei v. August Osterrieth, Erfurt a/M.

J. G. & S.

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MISSOURI BOTANICAL GARDEN

east of St George, Utah

Quercus pungens Mt Trumbull, ~~Tonto~~,
June 1877, E Palmer, leaf segments cotyledons

Quercus chrysolepis has been collected
as far east as San Francisco Mountain
New Mexico by CL Greene

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Von Ihrer

L. A. Re

nobellum

Frank

Fur

THE

v. August Osterrieth, Frkfrt a/M.

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Quercus pseudoprinus

Rosewood, Levi County, Florida
10 miles from Cedar Keys, 5 miles
from nearest point of Gulfcoast
on the Atlantic Gulf and West Indian
Transit Railroad.

M A C Garber

5818

130 / 340 0,26
26
80
78

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0 1 2 3 4 5 6 7 8 9 10
cm
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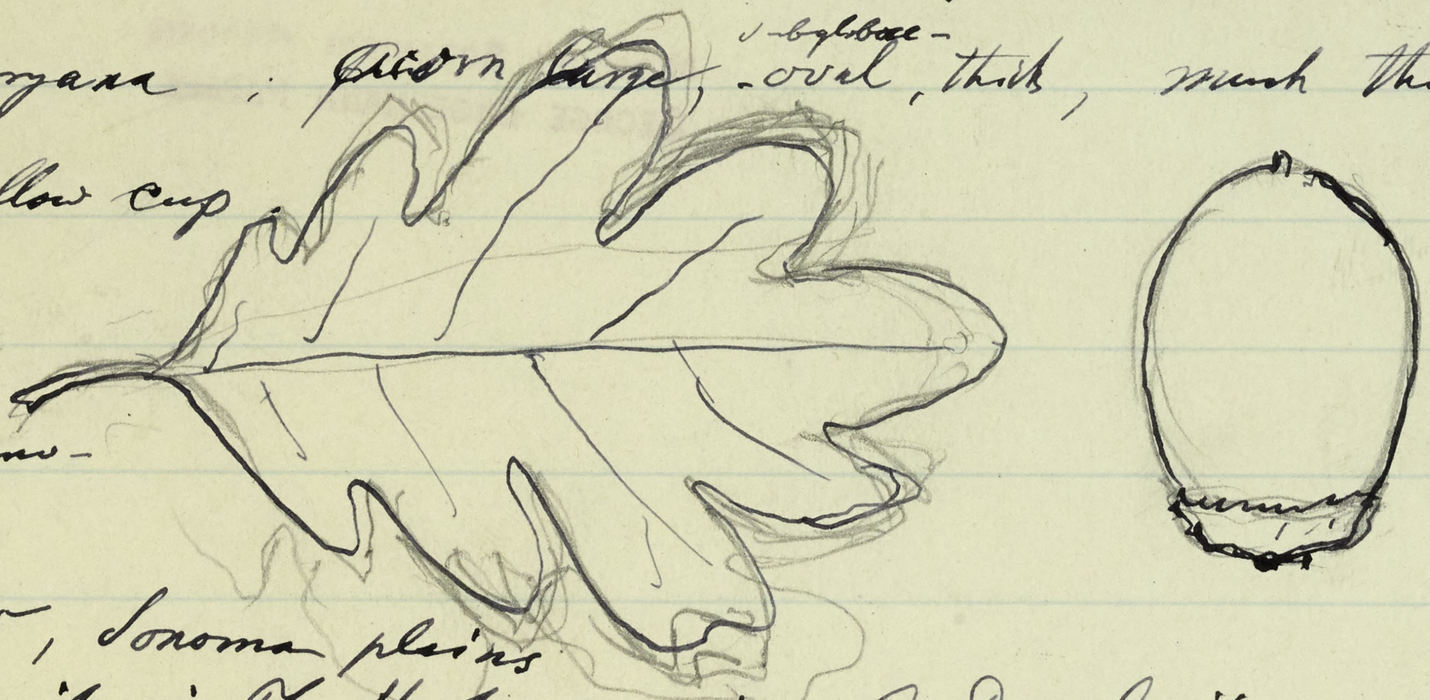
Quercus Neesii Liebm 1841 is most probably the large, swollen stiped

Q. Garryana ; acorn large, sub-globose - oval, thick, much thicker than

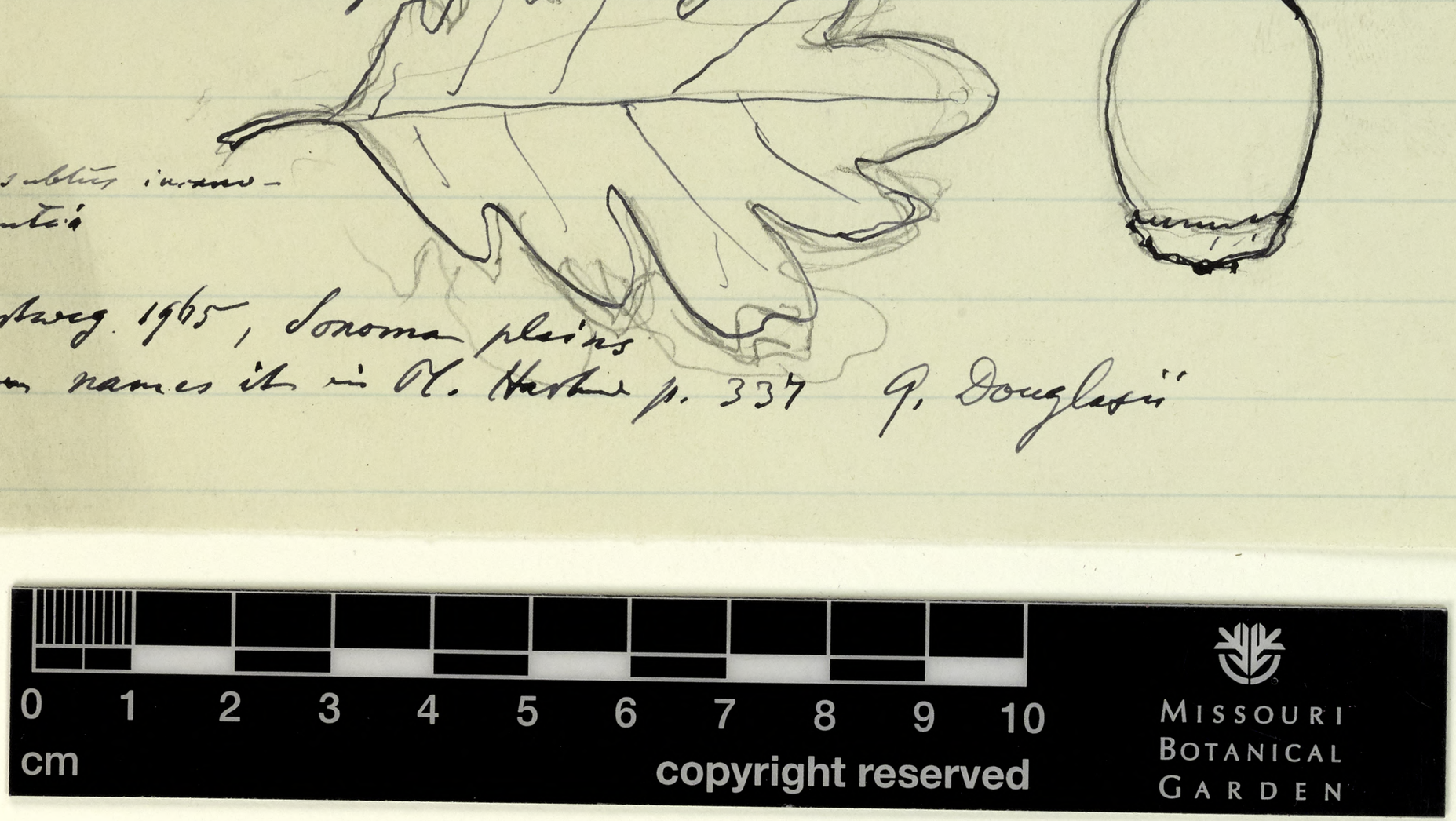
the shallow cup



folia subtus incano-
fasciculata

Hartweg 1965, Sonoma plains

Bentham names it in N. Hartw p. 337 Q. Douglasii



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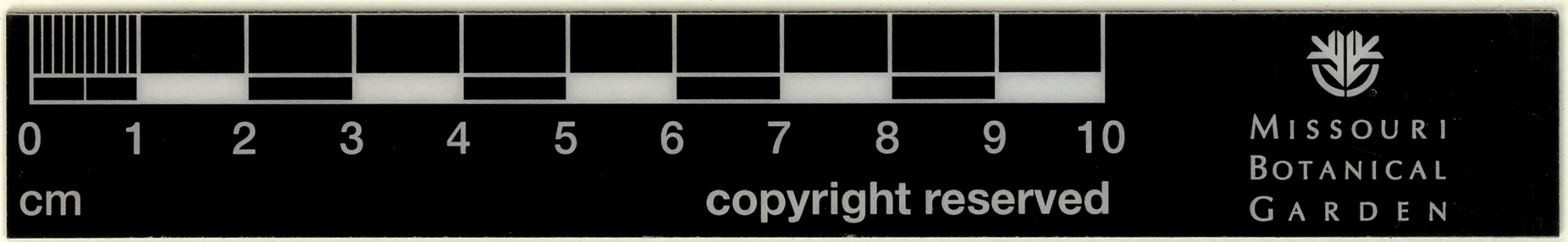
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